AMENDMENTS TO THE CLAIMS

1. (currently amended) A device for cutting a block into slabs, said device comprising: ~~a plurality of generally parallel, spaced-apart blades with~~

a plurality of generally parallel, spaced-apart blades,

each of the blades having a blade length with two ends and a center,

each of the blades having a plurality of cutting segments mounted thereon, the cutting segments being spaced apart from one another by a center-to-center distance,

each of the cutting segments comprising a continuous phase impregnated with a superabrasive material selected from one of natural diamond, synthetic diamond, cubic boron nitride, and combinations thereof; and

wherein there is a spacing variation of at least 1 mm between a maximum center-to-center distance and a minimum center-to-center distance of the cutting segments.

2. (original) The device of claim 1, wherein at least one of the cutting segments located at or within 10% of blade length from each end of the blades have a center-to-center spacing that differs by at least 1 mm from the center-to-center spacing of at least one of the cutting segments located at or within 10% of blade length from the center of the blades.

3. (original) The device of claim 2, wherein at least one of the cutting segments located at or within 25% of blade length from each end of the blades have a center-to-center spacing that differs by at least 2 mm from the center-to-center spacing of at least one of the cutting segments located at or within 25% of blade length from the center of the saw blades.

4. (original) The device of claim 2, wherein at least one of the cutting segments located at or within 25% of blade length from each end of the blades have a center-to-center spacing that differs by at least 5 mm from the center-to-center spacing of at least one of the cutting segments located at or within 25% of blade length from the center of the saw blades.

5. (original) The device of claim 1, wherein at least one of the cutting segments has a wear resistance property that differs by at least 10% from the wear resistance property of at least one of the other cutting segments mounted on the same blade.

6. (original) The device of claim 1, wherein at least one of the cutting segments has at least one wear resistance variable that is different from at least one of the other cutting segments mounted on the same blade, wherein the at least one wear resistance variable is selected from the group of:

concentration of the superabrasive materials;

grade of the superabrasive materials as measured by compressive fracture strength (CFS) property;

at least one dimension of said segment;

amount of secondary abrasives in said segment;

concentration of secondary abrasives in said segment; and

grain size of said superabrasive materials.

7. (currently amended) A device for cutting a block into slabs, said device comprising: ~~a plurality of generally parallel, spaced-apart blades~~,

a plurality of generally parallel, spaced-apart blades,

each of the blades having a plurality of cutting segments mounted thereon, the cutting segments being spaced apart from one another by a center-to-center distance,

each of the cutting segments comprising a continuous phase impregnated with a superabrasive material selected from one of natural diamond, synthetic diamond, cubic boron nitride, and combinations thereof,

wherein at least one of the cutting segments has a wear resistance property that differs by at least 10% from the wear resistance property of at least one of the other cutting segments mounted on the same blade.

8. (original) The device of claim 7, wherein at least one cutting segment has at least one wear resistance property variable that is different from at least one of the other cutting segments, said at least one wear resistance variable is selected from the group of:

concentration of the superabrasive materials ,

grade of the superabrasive materials as measured by compressive fracture strength (CFS) property;

at least one dimension of said segment;

amount of secondary abrasives in said segment;

concentration of secondary abrasives in said segment; and

grain size of said superabrasive materials.

9. (original) The device of claim 7, wherein at least two of the cutting segments comprise superabrasive materials with different sizes and grades.

10. (original) The device of claim 7, wherein the cutting segments contain blends of at least two components: coarse diamond crystals and fine diamond crystals having different compressive fracture strength (CFS) properties, and where the coarse diamond crystals have a CFS of at least about 70 N greater than the fine diamond crystals.

11. (currently amended) The device of claim 10, wherein ~~said~~ the CFS property difference between the coarse diamond crystals and the fine diamond crystals is between about 70 N and 100 N.

12. (original) The device of claim 10, wherein the coarse diamond crystals are at least about 300 μm larger than the fine diamond crystals.

13. (original) The device of claim 10, wherein the size difference between the coarse diamond crystals and the fine diamond crystals is between about 300 and 400 μm.

14. (currently amended) A method for cutting a block, ~~of granite, concrete, marble, sandstone,~~ limestone~~, fired brick, or composite materials thereof, into slabs, said method comprises subjecting said block to a cutting device comprising a plurality of generally parallel, spaced-apart blades, said~~ the method comprising:

providing a cutting device comprising a plurality of generally parallel, spaced-apart blades, each of the blades having a plurality of cutting segments mounted thereon, the cutting segments being spaced apart from one another by a center-to-center distance, each of the cutting segments comprising a continuous phase impregnated with a superabrasive material selected from one of natural diamond, synthetic diamond, cubic boron nitride, and combinations thereof, wherein at least one of the cutting segments has a higher wear resistance property than at least one of the other cutting segments mounted on the same blade; and

cutting a block using the cutting device.

15. (currently amended) A method for cutting a block ~~of granite, concrete, marble, sandstone, fired brick, or composite materials thereof, into slabs, said the method~~ comprising: ~~subjecting said block to a cutting device comprising a plurality of generally parallel, spaced-apart blades,~~

providing a cutting device comprising a plurality of generally parallel, spaced-apart blades, each of the blades having a blade length with two ends, ~~and~~ a center, ~~each of the blades having~~ and a plurality of cutting segments mounted thereon, the cutting segments being spaced-apart from one another by a center-to-center distance, each of the cutting segments comprising a continuous phase impregnated with a superabrasive material selected from one of natural diamond, synthetic diamond, cubic boron nitride, and combinations thereof, wherein there is a spacing variation of at least 1 mm between a maximum center-to-center distance of the cutting segments; and

cutting a block using the cutting device.

16. (original) The method of claim 15, wherein at least one of the cutting segments located at or within 10% of blade length from each end of the blades have a center-to-center spacing that differs by at least 2 mm from the center-to-center spacing of at least one of the cutting segments located at or within 10% of blade length from the center of the blades.

17. (original) The method of claim 15, wherein at least one of the cutting segments has at least one wear resistance property variable that is different from said at least one of the other cutting segments,

said at least one wear resistance variable is selected from the group of:

concentration of the superabrasive materials, grade of the superabrasive materials as measured by compressive fracture strength (CFS) property, dimensions of said segment, amount of secondary abrasives in said segment, concentration of secondary abrasives in said segment, and grain size of said superabrasive materials.

18. (original) The method of claim 17, wherein the cutting segments contain blends of at least two components: coarse diamond crystals and fine diamond crystals having different compressive fracture strength (CFS) properties, and wherein the coarse diamond crystals have a CFS of at least about 70 N greater than the fine diamond crystals.

19. (new) A device for cutting a block into slabs, comprising:

a plurality of generally parallel, spaced-apart blades, each of the blades having a plurality of cutting segments mounted thereon, each of the cutting segments comprising a continuous phase impregnated with a superabrasive material selected from one of natural diamond, synthetic diamond, cubic boron nitride, and combinations thereof;

wherein segments located within zones that experience high relative wear rates contain superabrasive material having a higher average CFS than segments located within zones that experience lower relative wear rates.

20. (new) The device of claim 19 wherein the higher average CFS is at least 10%.